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NEWS 1		Web Page for STN Seminar Schedule - N. America
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NEWS 14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS 15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS 16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
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NEWS 18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
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NEWS 21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS 22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS 23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS 24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS 25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS 26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS 27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS 28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS 29	JUN 25	CA/CAplus and USPAT databases updated with IPC reclassification data
NEWS 30	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS 31	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional

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                  organizations
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                  Assistant and BLAST plug-in
 NEWS 33  JUN 30  STN AnaVist enhanced with database content from EPFULL

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              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 16:43:22 ON 01 JUL 2008

=> file medline, uspatful, dgene, embase, wpids, fsta, biosis, biotechds
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.42       0.42

FILE 'MEDLINE' ENTERED AT 16:44:29 ON 01 JUL 2008

FILE 'USPATFULL' ENTERED AT 16:44:29 ON 01 JUL 2008
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FILE 'BIOTECHDS' ENTERED AT 16:44:29 ON 01 JUL 2008
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=> s (l-lysine or l-arginine) and (production)
L1       47341 (L-LYSINE OR L-ARGININE) AND (PRODUCTION)

=> s l1 and (DNA)
L2       17789 L1 AND (DNA)

=> s l2 and (lysE protein)
```

```
L3          15 L2 AND (LYSE PROTEIN)

=> e gunji, y
E1            1     GUNJETSPRAY/BI
E2          118     GUNJI/BI
E3            0 --> GUNJI, Y/BI
E4            2     GUNJIAN/BI
E5            5     GUNJII/BI
E6            1     GUNJIKAR/BI
E7            6     GUNJIMA/BI
E8            1     GUNJINA/BI
E9            2     GUNJISHIMA/BI
E10           8     GUNJO/BI
E11           1     GUNJO4000/BI
E12           1     GUNJOH/BI

=> e gunji, Y/au
E1           57     GUNJI YUKIO PEGIO/AU
E2            2     GUNJI YURIKO/AU
E3            0 --> GUNJI, Y/AU
E4            1     GUNJIAL NASEEM IQBAL/AU
E5            4     GUNJIAN/AU
E6            4     GUNJIAN A G/AU
E7            5     GUNJIAN ARMEN G/AU
E8            2     GUNJIC R/AU
E9            1     GUNJIE/AU
E10           1     GUNJIE T/AU
E11           1     GUNJIGAKE/AU
E12           1     GUNJIGAKE K/AU

=> e yasueda, H/au
E1            3     YASUEDA SHINJI/AU
E2            9     YASUEDA T/AU
E3            0 --> YASUEDA, H/AU
E4            1     YASUF/AU
E5            1     YASUF A/AU
E6            1     YASUF HIROAKI/AU
E7            1     YASUF TONY E/AU
E8            1     YASUF UMI KALSOM/AU
E9            1     YASUF ZADE E K/AU
E10           1     YASUFAKU KAZUHIRO/AU
E11           1     YASUFI A N K/AU
E12           1     YASUFTIKU KAZUHIRO/AU

=> s methylophilus or methylobacillus
L4        2037 METHYLOPHILUS OR METHYLOBACILLUS

=> s l4 and (S-2-aminoethyl)cysteine
MISSING OPERATOR MINOETHYL)CYSTEINE
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s (S-2-aminoethyl-cysteine)
L5          468 (S-2-AMINOETHYL-CYSTEINE)

=> d his

     (FILE 'HOME' ENTERED AT 16:43:22 ON 01 JUL 2008)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, BIOSIS, BIOTECHDS'
     ENTERED AT 16:44:29 ON 01 JUL 2008
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L1        47341 S (L-LYSINE OR L-ARGININE) AND (PRODUCTION)
L2        17789 S L1 AND (DNA)
L3           15 S L2 AND (LYSE PROTEIN)
                E GUNJI, Y
                E GUNJI, Y/AU
                E YASUEDA, H/AU
L4         2037 S METHYLOPHILUS OR METHYLOBACILLUS
L5          468 S (S-2-AMINOETHYL-CYSTEINE)

=> s l5 and l3
L6            7 L5 AND L3

=> d l6 ti abs ibib tot

L6   ANSWER 1 OF 7  USPATFULL on STN
TI     Method for Producing Basic Substance
AB     A method for producing a basic substance by fermentation comprising
       culturing a microorganism having an ability to produce the basic
       substance in a liquid medium contained in a fermentation tank to produce
       and accumulate the basic substance in the medium, wherein amount of
       sulfate and/or chloride ions used as counter ions of the basic substance
       is reduced by adjusting total ammonia concentration in the medium to be
       within a specific concentration range during at least a part of the
       total period of culture process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:       2007:278157  USPATFULL
TITLE:                  Method for Producing Basic Substance
INVENTOR(S):            Takeshita, Ryo, Kawasaki-shi, JAPAN
                        Sugimoto, Shinichi, Kawasaki-shi, JAPAN

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20070243590     A1   20071018
APPLICATION INFO.:      US 2007-697794     A1   20070409  (11)
RELATED APPLN. INFO.:   Continuation of Ser. No. WO 2005-JP18657, filed on 7
                        Oct 2005, UNKNOWN

                               NUMBER        DATE
                        ------------------ --------
PRIORITY INFORMATION:   JP 2004-295123     20041007
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
LEGAL REPRESENTATIVE:   CERMAK & KENEALY LLP, ACS LLC, 515 EAST BRADDOCK ROAD,
                        SUITE B, ALEXANDRIA, VA, 22314, US
NUMBER OF CLAIMS:       17
EXEMPLARY CLAIM:        1
NUMBER OF DRAWINGS:     6 Drawing Page(s)
LINE COUNT:             2705
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6   ANSWER 2 OF 7  USPATFULL on STN
TI     Method for producing L-lysine or L-
       arginine by using methanol-assimilating bacterium
AB     A DNA encoding a variant of a protein, the protein having a
       loop region and six hydrophobic helixes and involved in secretion of
       L-lysine to the outside of a cell, wherein the
       DNA encodes a variant of a protein not containing the loop
       region and facilitates secretion of L-lysine,
       L-arginine or both of these L-amino acids to the
       outside of a cell of a methanol-assimilating bacterium when the
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DNA is introduced into the bacterium, specifically lysE24, is introduced into a Methylobacillus bacteria to improve L-amino acid productivity, especially L-lysine and L-arginine productivities.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2005:4392 USPATFULL			
TITLE:	Method for producing L-lysine or L-arginine by using methanol-assimilating bacterium			
INVENTOR(S):	Gunji, Yoshiya, Kawasaki, JAPAN Yasueda, Hisashi, Kawasaki, JAPAN			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20050003495	A1	20050106	
	US 7335506	B2	20080226	
APPLICATION INFO.:	US 2003-716470	A1	20031120	(10)
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2002-336340		20021120	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	AJINOMOTO CORPORATE SERVICES, LLC, INTELLECTUAL PROPERTY DEPARTMENT, 1120 CONNECTICUT AVE., N.W., WASHINGTON, DC, 20036			
NUMBER OF CLAIMS:	9			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	2 Drawing Page(s)			
LINE COUNT:	1485			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 3 OF 7 USPATFULL on STN

TI Method for producing L-amino acid using methylotroph

AB A DNA encoding for a mutant of LysE protein, or a homologous protein thereof, of a coryneform bacterium, wherein the mutant, when introduced into a methanol-assimilating bacterium imparts resistance to L-lysine analogue. The DNA encoding for a mutant of LysE protein, or a homologous protein thereof, is introduced into a methanol-assimilating bacterium to improve L-lysine and L-arginine productivity of the methanol-assimilating bacterium.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2004:190204 USPATFULL			
TITLE:	Method for producing L-amino acid using methylotroph			
INVENTOR(S):	Gunji, Yoshiya, Kawasaki, JAPAN Yasueda, Hisashi, Kawasaki, JAPAN			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20040146974	A1	20040729	
APPLICATION INFO.:	US 2003-716480	A1	20031120	(10)
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2002-336315		20021120	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			

LEGAL REPRESENTATIVE: AJINOMOTO CORPORATE SERVICES, LLC, INTELLECTUAL PROPERTY DEPARTMENT, 1120 CONNECTICUT AVE., N.W., WASHINGTON, DC, 20036
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 1414
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 7 USPATFULL on STN
TI Method for producing L-amino acid using methylotroph
AB The present invention describes a method for producing an L-amino acid comprising culturing a microorganism having an ability to produce an L-amino acid in a medium, whereby the L-amino acid accumulates in the medium, and collecting the L-amino acid from the medium, whereby said microorganism comprises a methanol-utilizing bacterium having the Entner-Doudoroff pathway in which 6-phosphogluconate dehydratase activity and/or 2-keto-3-dexoy-6-phosphogluconate aldolase activity is enhanced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:184552 USPATFULL
TITLE: Method for producing L-amino acid using methylotroph
INVENTOR(S): Gunji, Yoshiya, Kawasaki, JAPAN
Yasueda, Hisashi, Kawasaki, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20040142435	A1	20040722	
	US 7217543	B2	20070515	
APPLICATION INFO.:	US 2003-716473	A1	20031120	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-336346	20021120

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AJINOMOTO CORPORATE SERVICES, LLC, INTELLECTUAL PROPERTY DEPARTMENT, 1120 CONNECTICUT AVE., N.W., WASHINGTON, DC, 20036
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1528
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 7 USPATFULL on STN
TI Method for producing L-lysine or L-arginine by using methanol assimilating bacterium
AB A DNA encoding a variant of a protein, having a loop region and six hydrophobic helixes and involved in excretion of L-lysine to outside of a cell, wherein the DNA encodes a mutant protein not containing the loop region that is contained in a wild-type protein and facilitates excretion of L-lysine, L-arginine or both of these L-amino acids to outside of a cell of a methanol assimilating bacterium when the DNA is introduced into the bacterium, specifically lysE24, is introduced into a methanol assimilating bacterium such as Methylophilus bacteria to improve L-amino acid productivity, especially L-lysine and L-arginine productivities.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2003:180857 USPATFULL			
TITLE:	Method for producing L-lysine or L-arginine by using methanol assimilating bacterium			
INVENTOR(S):	Gunji, Yoshiya, Kawasaki-shi, JAPAN Yasueda, Hisashi, Kawasaki-shi, JAPAN			
PATENT ASSIGNEE(S):	Ajinomoto Co., Inc., Tokyo, JAPAN (non-U.S. corporation)			
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20030124687	A1	20030703	
	US 7169587	B2	20070130	
APPLICATION INFO.:	US 2002-166142	A1	20020611	(10)
	NUMBER		DATE	
PRIORITY INFORMATION:	JP 2001-177075		20010612	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	APPLICATION			
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314			
NUMBER OF CLAIMS:	11			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	2 Drawing Page(s)			
LINE COUNT:	1234			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 7 WPIDS COPYRIGHT 2008 THOMSON REUTERS on STN

TI New DNA encoding mutant form of LysE protein , useful for transformation of methanol-utilizing bacteria for production of lysine and arginine, also new transformants

AN 2004-403037 [38] WPIDS

AB FR 2847264 A1 UPAB: 20060121

NOVELTY - DNA (I) that encodes a mutant (II) of the LysE (lysine export) protein of a coryneform bacterium, or its homolog, is new.

DETAILED DESCRIPTION - DNA (I) that encodes a mutant (II) of the LysE (lysine export) protein of a coryneform bacterium, or its homolog, is new. (II) is a 236 amino acid (aa) sequence (2), reproduced, in which at least Gly56 has been replaced by a different aa, optionally with one or more other aa substituted, deleted, inserted or added. When (I) is introduced into a methanol-utilizing bacterium it confers resistance to a lysine analog (III).

INDEPENDENT CLAIMS are also included for:

(1) bacterium (A) of the genera Methylophilus or Methylobacillus into which (I) has been introduced, in expressible form, and which can produce L-Lys or L-Arg; and

(2) producing L-Lys and L-Arg by culturing (A).

USE - Bacteria of the genera Methylophilus or Methylobacillus that contain (I) are used for production of L-lysine or L-arginine.

ADVANTAGE - Introduction of (I) induces export of Lys and/or Arg from the cells, so improves productivity of these amino acids, from an inexpensive carbon source, and their concentration in the extracellular medium. The wild-type LysE sequence is not functional in methanol-utilizing bacteria.

ACCESSION NUMBER:	2004-403037 [38] WPIDS
DOC. NO. CPI:	C2004-151152 [38]
TITLE:	New DNA encoding mutant form of LysE protein, useful for transformation of

methanol-utilizing bacteria for production of lysine and arginine, also new transformants

DERWENT CLASS: B05; D16; E16

INVENTOR: GUNJI Y; YASUEDA H

PATENT ASSIGNEE: (AJIN-C) AJINOMOTO CO INC; (AJIN-C) AJINOMOTO KK; (GUNJ-I) GUNJI Y; (YASU-I) YASUEDA H

COUNTRY COUNT: 5

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
FR 2847264	A1	20040521	(200438)*	FR	52[1]	
JP 2004166592	A	20040617	(200440)	JA	39	
US 20040146974	A1	20040729	(200450)	EN		
DE 10352668	A1	20040812	(200453)	DE		
CN 1618970	A	20050525	(200560)	ZH		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
FR 2847264	A1	FR 2003-13574	20031120
JP 2004166592	A	JP 2002-336315	20021120
DE 10352668	A1	DE 2003-10352668	20031111
US 20040146974	A1	US 2003-716480	20031120
CN 1618970	A	CN 2003-10120453	20031120

PRIORITY APPLN. INFO: JP 2002-336315 20021120

L6 ANSWER 7 OF 7 BIOTECHDS COPYRIGHT 2008 THOMSON REUTERS on STN

TI New DNA encoding mutant form of LysE protein , useful for transformation of methanol-utilizing bacteria for production of lysine and arginine, also new transformants; plasmid-mediated lysE gene transfer and expression in Methylophilus methylotropus or Methylobacillus sp. for recombinant amino acid production

AN 2004-16510 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - DNA (I) that encodes a mutant (II) of the LysE (lysine export) protein of a coryneform bacterium, or its homolog, is new.

DETAILED DESCRIPTION - DNA (I) that encodes a mutant (II) of the LysE (lysine export) protein of a coryneform bacterium, or its homolog, is new. (II) is a 236 amino acid (aa) sequence (2), reproduced, in which at least Gly56 has been replaced by a different aa, optionally with one or more other aa substituted, deleted, inserted or added. When (I) is introduced into a methanol-utilizing bacterium it confers resistance to a lysine analog (III). INDEPENDENT CLAIMS are also included for: (1) bacterium (A) of the genera Methylophilus or Methylobacillus into which (I) has been introduced, in expressible form, and which can produce L-Lys or L-Arg; and (2) producing L-Lys and L-Arg by culturing (A).

BIOTECHNOLOGY - Preferred Nucleic Acid: (I) is (a) a 711 bp sequence (1), reproduced, from Brevibacterium lactofermentum, that has been mutated to replace at least the codon for 56Gly or (b) a sequence (or derived probe) that hybridizes to (1) under stringent conditions. Preferably 56Gly is replaced by Ser and other modifications are particularly 55Ala replaced by Thr and 137Asp by Gly. Preferred Materials: (III) is S-(2-aminoethyl) cysteine. Preferred Process: Methanol-utilizing cells of the

genera Methylophilus or Methylobacillus are grown on medium containing methanol as main carbon source. Optionally the activity of other genes involved in biosynthesis of the specified amino acids is also increased. Preparation: (I) is derived from the wild-type lysE gene by standard methods of site-specific or random mutagenesis, e.g. using hydroxylamine or UV light. The mutated sequence is cloned into a vector functional in methanol-utilizing bacteria, particularly a high-copy number vector, or into a transposon for chromosomal integration, and the resulting constructs used conventionally for cell transfection. The modified cells are grown on medium containing 0.001-30% methanol, under aerated conditions at pH 5-7 and 20-45 degreesC, for typically 24-120 hours. L-Lys and L-Arg are recovered from the culture medium e.g. using an ion-exchange resin.

USE - Bacteria of the genera Methylophilus or Methylobacillus that contain (I) are used for production of L-lysine or L-arginine.

ADVANTAGE - Introduction of (I) induces export of Lys and/or Arg from the cells, so improves productivity of these amino acids, from an inexpensive carbon source, and their concentration in the extracellular medium. The wild-type LysE sequence is not functional in methanol-utilizing bacteria.

EXAMPLE - The lysE gene of Brevibacterium lactofermentum 2256 (ATCC 13869) was cloned into pRS to form pRlysE, and this subjected to mutation using hydroxylamine. The mutated plasmids were introduced into Methylophilus methylotropus AS1 (NCIMB 10515) and cells selected for resistance to S-(2-aminoethyl) cysteine. Plasmid pRSlysE564 in which 56Gly had been replaced by Ser was identified. When strain AS1 was transformed with pRSlysE564 that also included the dapA gene for feedback-resistant dihydrodipicolinate synthase, then cultured in methanol-containing medium for 34 hours at 37 degreesC, with stirring, the concentration of L-lysine in the culture supernatant was 1.4 g/l; compare 0.1 g/l for AS1 containing empty vector. (52 pages)

ACCESSION NUMBER: 2004-16510 BIOTECHDS
TITLE: New DNA encoding mutant form of LysE protein, useful for transformation of methanol-utilizing bacteria for production of lysine and arginine, also new transformants; plasmid-mediated lysE gene transfer and expression in Methylophilus methylotropus or Methylobacillus sp. for recombinant amino acid production
AUTHOR: GUNJI Y; YASUEDA H
PATENT ASSIGNEE: AJINOMOTO CO INC
PATENT INFO: FR 2847264 21 May 2004
APPLICATION INFO: FR 2003-13574 20 Nov 2003
PRIORITY INFO: JP 2002-336315 20 Nov 2002; JP 2002-336315 20 Nov 2002
DOCUMENT TYPE: Patent
LANGUAGE: French
OTHER SOURCE: WPI: 2004-403037 [38]

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